

## ABSTRACT OF THE DISCLOSURE

A multi-layer circuit board includes first, second, third, fourth, fifth, sixth and seventh insulating substrates disposed sequentially one above the other; first, second, third and fourth signal wiring layers; first, second and third ground wiring layers; and a power wiring layer. Each of the first and seventh insulating substrates has a thickness ranging from 2.5 to 7.5 mil. Each of the second and sixth insulating substrates has a thickness ranging from 3 to 13 mil. Each of the third and fifth insulating substrates has a thickness ranging from 3 to 15 mil. The fourth insulating substrate has a thickness ranging from 2 to 6 mil. The first signal wiring layer has a first resistance with respect to the first ground wiring layer. The second signal wiring layer has a second resistance with respect to the first and second ground wiring layers. The third signal wiring layer has a third resistance with respect to the third ground wiring layer and the power wiring layer. The fourth signal wiring layer has a fourth resistance with respect to the third ground wiring layer. The first, second, third and fourth resistances are within the range of 49.5 to 60.5 ohms.

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